

PATENT  
Customer Number 22,852  
Attorney Docket No. 7040.0100.00

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: )  
 )  
Marco CANTU' et al. )  
 )  
Serial No.: Not yet assigned ) Group Art Unit: Not yet assigned  
 )  
Filed: July 31, 2001 ) Examiner: Not yet assigned  
 )  
For: TYRE FOR VEHICLE WHEELS )

Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

**PRELIMINARY AMENDMENT**

Prior to the examination of the above-captioned application, please amend this  
application as follows:

**IN THE SPECIFICATION:**

Please amend the specification, as follows:

Add two section headings, a section subheading, and a paragraph immediately after the  
title TYRE FOR VEHICLE WHEELS, as follows:

**--CROSS-REFERENCE TO RELATED APPLICATIONS**

This application is a national stage entry under 35 U.S.C. § 371 from International  
Application No. PCT/EP00/11898, filed November 29, 2000, in the European Patent Office;

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additionally, Applicants claim the right of priority under 35 U.S.C. § 119(a) - (d) based on patent application No. MI99A002515, filed December 1, 1999, in the Italian Patent Office; further, Applicants claim the benefit under 35 U.S.C. § 119(e) based on prior-filed, copending provisional application No. 60/187,384, filed March 7, 2000, in the U.S. Patent and Trademark Office; the contents of all of which are relied upon and incorporated herein by reference.

### BACKGROUND OF THE INVENTION

#### Field of the Invention--

Page 1, line 8, add section subheading --Description of the Related Art-- prior to the start of the paragraph beginning "A tyre in its more general form . . . ."

Page 4, line 4, add section heading --SUMMARY OF THE INVENTION-- prior to the start of the paragraph beginning "The Applicant has perceived that the formation . . . ."

Add a new Page 25 after the claims, adding the following ABSTRACT OF THE DISCLOSURE. A new, separate Page 25 including the ABSTRACT OF THE DISCLOSURE is enclosed.

#### --ABSTRACT OF THE DISCLOSURE

A tyre for vehicle wheels provided with a tread pattern includes at least one continuous central circumferential groove straddling an equatorial plane of the tyre, at least two continuous lateral circumferential grooves having median planes substantially parallel to the equatorial plane

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of the tyre, and a plurality of transverse grooves. These grooves delimit at least four circumferential rows of blocks, two central rows and two shoulder rows. Each block of the central rows is defined by a plurality of sides and at least four vertices, a pair of front vertices and a pair of rear vertices, in relation to a predetermined running direction of the tyre. The blocks of the central rows include a first transverse notch having a first terminal end inside a respective block of the central rows and a first starting end communicating with the at least one central circumferential groove.--

**IN THE CLAIMS:**

Please cancel, without prejudice or disclaimer, claims 1-28, and add new claims 29-56, as follows:

--29. (new) A tyre for vehicle wheels provided with a tread pattern, comprising:

at least one continuous central circumferential groove straddling an equatorial plane of the tyre;

at least two continuous lateral circumferential grooves having median planes substantially parallel to the equatorial plane of the tyre; and

a plurality of transverse grooves;

wherein the at least one continuous central circumferential groove, the at least two continuous lateral circumferential grooves, and the plurality of transverse grooves delimit at least four circumferential rows of blocks, two central rows and two shoulder rows, each block of the central rows being defined by a plurality of sides and at least four vertices, a pair of front vertices and a pair of rear vertices, in relation to a predetermined running direction of the tyre;

wherein the blocks of the central rows comprise a first transverse notch having a first terminal end inside a respective block of the central rows and a first starting end communicating with the at least one central circumferential groove,

wherein the first transverse notch extends beyond a longitudinal median plane of a respective central row of blocks,

wherein a first ratio of an axial width of the blocks of each central row to an overall axial width of a tread band, measured between shoulder ends of the tyre, is not less than 0.18:1, and

wherein the transverse grooves delimiting the blocks of the shoulder rows comprise, at least in a vicinity of a closest lateral circumferential groove, portions inclined in relation to the equatorial plane of the tyre in a direction opposite to an inclination of the transverse grooves delimiting the blocks of a closest central row.

30. (new) The tyre of claim 29, wherein the blocks of the central rows include front and rear sides parallel to each other and inclined in relation to the equatorial plane of the tyre by a first angle between 30° and 60°.

31. (new) The tyre of claim 29, wherein the blocks of the central rows include sides defined between respective front and rear vertices and parallel to the equatorial plane of the tyre.

32. (new) The tyre of claim 29, wherein the blocks of the central rows include at least front or rear sides inclined in relation to the equatorial plane of the tyre by a first angle, and wherein the first transverse notch forms a second angle with respect to the equatorial plane of the tyre in a same direction as the first angle.

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33. (new) The tyre of claim 29, wherein each first transverse notch is of similar dimensions.

34. (new) The tyre of claim 29, wherein the inclined portions of the transverse grooves delimiting the blocks of the shoulder rows form, in relation to the equatorial plane of the tyre, a third angle between 30° and 60°.

35. (new) The tyre of claim 29, wherein a plurality of the blocks of the central rows comprises a second transverse notch.

36. (new) The tyre of claim 29, wherein each of the blocks of the central rows comprises a second transverse notch.

37. (new) The tyre of claim 36, wherein the second transverse notches are of similar dimensions.

38. (new) The tyre of claim 29, wherein the blocks of the central rows comprise a second transverse notch extending between a second terminal end inside a respective block and a second starting end in a position opposite the second terminal end.

39. (new) The tyre of claim 38, wherein the second starting end communicates with a closest lateral circumferential groove.



47. (new) The tyre of claim 38, wherein in the blocks of the central rows, a distance between the first terminal end of the first transverse notch and a longitudinal axis of a respective second transverse notch is between 5 mm and 15 mm.

48. (new) The tyre of claim 44, wherein the inclined portion of alternate transverse grooves delimiting the blocks of the shoulder rows extends and forms a second transverse notch inside a block of the closest central row.

49. (new) The tyre of claim 29, wherein the transverse grooves delimiting the blocks of the shoulder rows are repeated circumferentially with a predetermined first pitch.

50. (new) The tyre of claim 49, wherein the first pitch is between 25 mm and 45 mm for tyres having a circumferential development, measured along the equatorial plane of the tyre, between 1,970 mm and 2,010 mm.

51. (new) The tyre of claim 49, wherein the blocks of the central rows are repeated circumferentially with a second pitch that is twice the first pitch.

52. (new) The tyre of claim 49, wherein the transverse grooves delimiting the blocks of the central rows and the transverse grooves delimiting the blocks of the shoulder rows are staggered by an amount at least equal to 50% of the first pitch.

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53. (new) The tyre of claim 29, wherein the blocks of the central rows have a rhomboidal shape.

54. (new) The tyre of claim 29, wherein each first transverse notch lies in a substantially intermediate position in a respective block.

55. (new) The tyre of claim 29, wherein the first ratio is between 0.40:1 and 0.50:1.

56. (new) A premoulded tread band provided with a tread pattern, for retreading worn tyres, comprising:

at least one continuous central circumferential groove straddling an equatorial plane of the tyre;

at least two continuous lateral circumferential grooves having median planes substantially parallel to the equatorial plane of the tyre; and

a plurality of transverse grooves;

wherein the at least one continuous central circumferential groove, the at least two continuous lateral circumferential grooves, and the plurality of transverse grooves delimit at least four circumferential rows of blocks, two central rows and two shoulder rows, each block of the central rows being defined by a plurality of sides and at least four vertices, a pair of front vertices and a pair of rear vertices, in relation to a predetermined running direction of the tyre;

wherein the blocks of the central rows comprise a transverse notch having a terminal end inside a respective block of the central rows and a starting end communicating with the at least one central circumferential groove,

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wherein the transverse notch extends beyond a longitudinal median plane of a respective central row of blocks,

wherein a ratio of an axial width of the blocks of each central row to an overall axial width of a tread band, measured between shoulder ends of the tyre, is not less than 0.18:1, and

wherein the transverse grooves delimiting the blocks of the shoulder rows comprise, at least in a vicinity of a closest lateral circumferential groove, portions inclined in relation to the equatorial plane of the tyre in a direction opposite to an inclination of the transverse grooves delimiting the blocks of a closest central row.--

### REMARKS

Applicants submit this Preliminary Amendment together with a national stage entry under 35 U.S.C. § 371.

In this Amendment, Applicants add three section headings, two section subheadings, and an Abstract of the Disclosure to conform to U.S. practice. Additionally, Applicants add claims to the right of priority and benefit. Further, Applicants cancel, without prejudice or disclaimer, claims 1-28, and add new claims 29-56, which include the same subject matter as the original claims, to improve clarity. The originally filed specification, claims, abstract, and drawings fully support the amendments to the specification and the addition of new claims 29-56. No new matter was introduced.

FOOTNOTES

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If there is any fee due in connection with the filing of this Preliminary Amendment,  
please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

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GARRETT & DUNNER, L.L.P.

Dated: July 31, 2001

By: 

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